

**ABSTRACT OF THE DISCLOSURE**

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A thermal print head in a thermal printer for printing a digital image, the digital image being composed of lines of multi-bit pixels, the print head having a plurality of thermal resistors, adapted to be simultaneously addressed in parallel by a corresponding plurality of shift register elements, the print head being pulsed a plurality of times to print one line of the image. The print head is driven by providing a table of additive complement values, one additive complement value for each of the possible values of a multi-bit pixel, successively adding each of the complement values to each of the pixel values in a line to create a succession of sums, each sum having an overflow bit, and applying the overflow bits to the shift register elements to drive the print head.

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